

Missouri Department of Natural Resources



PUBLIC NOTICE

DRAFT MISSOURI STATE OPERATING PERMIT

DATE: October 22, 2004

In accordance with the state Clean Water Law, Chapter 644, RSMo, Clean Water Commission regulation 10 CSR 20-6.010, and the federal Clean Water Act, the applicants listed herein have applied for authorization to either discharge to waters of the state or to operate a no-discharge wastewater treatment facility. The proposed permits for these operations are consistent with applicable water quality standards, effluent standards and/or treatment requirements or suitable timetables to meet these requirements (see 10 CSR 20-7.015 and 7.031). All permits will be issued for a period of five years, unless noted otherwise in the Public Notice for that discharge.

On the basis of preliminary staff review and the application of applicable standards and regulations, the Missouri Department of Natural Resources (MDNR), as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions. The proposed determinations are tentative pending public comment.

Persons wishing to comment on the proposed permit conditions are invited to submit them in writing to the Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri 65102, ATTN: Peter Goode, P.E., Chief, NPDES Permits and Engineering Section. Please include the permit number in all comment letters.

Comments should be confined to the issues relating to the proposed action and permit(s) and the effect on water quality. The MDNR may not consider as relevant comments or objections to a permit based on issues outside the authority of the Clean Water Commission, (see Curdt v. Mo. Clean Water Commission, 586 S.W.2d 58 Mo. App. 1979).

All comments must be postmarked by November 22, 2004 or received in our office by 5:00 p.m. on November 25, 2004. The requirement of a signed document makes it impossible to accept email comments for consideration at this time. Comments will be considered in the formulation of all final determinations regarding the applications. If response to this notice indicates significant public interest, a public meeting or hearing may be held after due notice for the purpose of receiving public comment on the proposed permit or determination. Public hearings and/or issuance of the permit will be conducted or processed according to 10 CSR 20-6.020.

Copies of all draft permits and other information including copies of applicable regulations are available for inspection and copying at DNR's website, <http://www.dnr.mo.gov/wpscd/wpcp/homewpcp.htm>, or at the Department of Natural Resources, Water Protection Program, 205 Jefferson Street, P.O. Box 176, Jefferson City, Missouri 65102, between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday.

Public Notice Date: October 22, 2004
Permit Number: MO-0000159
Northeast Regional Office

FACILITY NAME AND ADDRESS	NAME AND ADDRESS OF OWNER
Holcim (US) Inc. – Clarksville Plant 14738 Highway 79 North Clarksville, MO 63336	Holcim (US) Inc. P.O. Box 122 Dundee, MI 48131
RECEIVING STREAM & LEGAL DESCRIPTION	TYPE OF DISCHARGE
Mississippi River & Branch of Calumet Creek (Mississippi River from the Des Moines River to the Mississippi River) Secs. 7 & 18, T53N, R1E, Pike County	Industrial, reissuance

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644, S. 644.010, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-50, 92nd Congress) as amended,

Permit No. MO-0000159

Owner: Holcim (US) Inc.
Address: P.O. Box 122, Dundee, MI 48131

Continuing Authority: Same as above
Address: Same as above

Facility Name: Holcim (US) Inc. – Clarksville Plant
Address: 14738 Highway 79 North, Clarksville, MO 63336

Legal Description: Secs. 7 and 18, T53N, R1E, Pike County

Receiving Stream: Outfall #002 – Calumet Creek (P)
All Other Outfalls – Mississippi River (P)

First Classified Stream and ID: Outfall #002 – Calumet Creek (P) (0018)
All Other Outfalls - Mississippi River (P) MO-0001-1998

USGS Basin & Sub-watershed No.: 07110004-110003

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

See page 2

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

Effective Date

Stephen M. Mahfood, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

Expiration Date
MO 780-0041 (10-93)

Jim Hull, Director of Staff, Clean Water Commission

FACILITY DESCRIPTION (continued)

Outfall #001 - Storm water runoff/non-contact cooling water/water treatment plant/six settling basins (series operated)–SIC #3241
Actual flow is 1.85 MGD.
Design flow is 2.5 MGD.
Stormwater settling basin solids and water plant solids landfilled.
This outfall discharges to Outfall #006.

Outfall #002 - Storm water runoff/pumping/two settling basins (series operated)–SIC #1422 Design flow is 0.33 MGD.
Stormwater settling basin solids landfilled.

Outfall #003 - An extended aeration treatment plant/settling basin–SIC #1422
Design population equivalent is 500.
Actual flow is 0.010 MGD.
Design flow is 0.050 MGD.
Design sludge production is 10.5 dry tons/year.

Outfall #004 – Was an extended aeration treatment plant/settling basin–SIC #1422
Flow eliminated by septic system.

Outfall #005 - Collection Sump/Sand Filter–SIC #3241
Storm water runoff.
Flow is dependent upon precipitation.
Stormwater settling basin solids landfilled.

Outfall #006 - Stormwater runoff from plant area/shipping area, Highway 79, and Railroad tracks–SIC Code #3241
Outfall #003 and #004/settling basin/flow is dependent upon precipitation.
Stormwater settling basin, solids landfilled.

Outfall #007 - Stormwater from shipping facility - SIC #3241

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 3 of 7	
					PERMIT NUMBER MO-0000159	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u> - stormwater, non-contact cooling water, equipment wash water						
Flow	MGD	*		*	once/month	24 hr. total
Total Suspended Solids	mg/L	*		*	once/month	grab
Oil and Grease	mg/L	15		10	once/month	grab
pH – Units	SU	***		***	once/month	grab
Total Residual Chlorine	mg/L	0.1		0.1	once/month	grab
Chemical Oxygen Demand	mg/L	*			once/month	grab
<u>Outfall #002</u> – stormwater						
Flow	MGD	*		*	once/month	24 hr. total
pH – Units (Note 1)	SU	***		***	once/month	grab
Oil and Grease	mg/L	15		10	once/month	grab
Total Suspended Solids (Note 1)	mg/L	50		50	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE _____.						
Total Toxic Organics (Note 1)	mg/L	*		*	once/year	grab
<u>Outfall #003</u> - extended aeration treatment plant						
Flow	MGD	*		*	once/quarter****	24 hr. total
Biochemical Oxygen Demand,**	mg/L		45	30	once/quarter****	Note 4
Total Suspended Solids**	mg/L		45	30	once/quarter****	Note 4
pH – Units	SU	***		***	once/quarter****	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE _____. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS						PAGE NUMBER 4 of 7	
						PERMIT NUMBER MO-0000159	
The permittee is authorized to discharge from outfall(s) with serial number(s) specified in application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:							
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)			EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
	UNIT	MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE	
<u>Outfall #006 - multiple sources</u>							
Flow	MGD	*		*	once/year	24 hr. estimate	
Intake Total Suspended Solids (Note 2)	mg/L	*		*	once/year	grab	
Discharge Total Suspended Solids (Note 2)	mg/L	*		*	once/year	grab	
Net Total Suspended Solids (Note 2)	mg/L	50		50	once/year	grab	
pH - Units	SU	***		***	once/year	grab	
Total Toxic Organics (Note 3)	mg/L	*		*	once/year	grab	
Total Residual Chlorine	mg/L	0.1		0.1	once/year	grab	
Oil and Grease	mg/L	15		10	once/year	grab	
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE _____.							
<u>Outfalls #005 and #007 – stormwater</u>							
Flow	MGD	*		*	once/quarter	24 hr. estimate	
Total Suspended Solids (Note 1)	mg/L	50		50	once/quarter****	grab	
pH – Units (Note 1)	SU	***		***	once/quarter****	grab	
Oil and Grease	mg/L	15		10	once/quarter****	grab	
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE _____.							
<u>Mississippi River Intake Monitoring Point</u>							
Total Suspended Solids (Note 2)	mg/L	*		*	once/quarter	grab	
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE _____. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.							
B. STANDARD CONDITIONS							
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.							

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** This facility is required to meet a removal efficiency of 85% or more.
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- **** Sample once per quarter in the months of March, June, September, and December.

Note 1 - If flow is due to a 10-year, 24-hour rainfall event (5.0 inches in Pike County), pH and Total Suspended Solids limits are waived. All other limits are in effect at all times.

Note 2 - Total Suspended Solids sampling in river is for Outfall #006. Sample must be taken at same time as Outfall #006 sample.

Note 3 - See List on Page 6.

Note 4 - A composite sample made from a minimum of five grab samples collected within a 24 hour period with a minimum of two hours between each grab sample.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

Note 3 - Total Toxic Organics

Acenaphthene	4-chlorophenyl phenyl ether
Acrolein	4-bromophenyl phenyl ether
Acrylonitrile	Bis (2-chloroisopropyl) ether
Benzene	Bis (2-chloroethoxy) methane
Benzidine	Methylene Chloride (dichloromethane)
Carbon Tetrachloride (tetrachloromethane)	Methyl Chloride (chloromethane)
Chlorobenzene	Methyl bromide (bromomethane)
1,2,4-trichlorobenzene	Bromoform (tribromomethane)
Hexachlorobenzene	Dichlorobromomethane
1,2-dichloroethane	Chlorodibromomethane
1,1,1-trichloroethane	Hexachlorobutadiene
Hexachloroethane	Hexachlorocyclopentadiene
1,1-dichloroethane	Isophthalonitrile
1,1,2-trichloroethane	Isophthalonitrile
1,1,2,2-tetrachloroethane	Methyl benzoate
Chloroethane	Methyl chloroacetate
Bis (2-chloroethyl) ether	4-nitrophenol
2-chloroethyl vinyl ether	2,4-dinitrophenol
N-nitrosodi-n-propylamine	4,6-dinitro-o-cresol
Pentachlorophenol	N-nitrosodimethylamine
Phenol	N-nitrosodiphenylamine
Bis (2-ethylhexyl) phthalate	Phenanthrene
Butyl benzyl phthalate	1,2,5,6-dibenzanthracene (dibenzo(a,h)anthracene)
Di-n-butyl phthalate	Indeno (1,2,3-cd) pyrene
	(2,3-o-phenylene pyrene)
Di-n-octyl phthalate	Pyrene
Diethyl phthalate	Tetrachloroethylene
Dimethyl phthalate	Toluene
1,2-benzanthracene (benzo(a)anthracene)	Trichloroethylene
Benzo(a)pyrene (3,4-benzopyrene)	Vinyl Chloride (chloroethylene)
3,4-benzofluoranthene (benzo(b)fluoranthene)	Aldrin
11,12-benzofluoranthene (benzo(k)fluoranthene)	Dieldrin
Chrysene	Chlordane (technical mixture and metabolites)
Anthracene	4,4-DDT
1,12-benzoperylene (benzo(ghi)perylene)	4,4-DDE (p,p-DDX)
Fluorene	4,4-DDD (p,p-TDE)
2-chloronaphthalene	Alpha-endosulfan
2,4,6-trichlorophenol	Beta-endosulfan
Parachlorometa cresol	Endosulfan sulfate
Chloroform (trichloromethane)	Endrin
2-chlorophenol	Endrin aldehyde
1,2-dichlorobenzene	Heptachlor
1,3-dichlorobenzene	Heptachlor epoxide (BHC hexachlorocyclohexane)
1,4-dichlorobenzene	Alpha-BHC
3,3-dichlorobenzidine	Beta-BHC
1,1-dichloroethylene	Gamma-BHC
1,2-trans-dichloroethylene	Delta-BHC (PCB polychlorinated biphenyls)
2,4-dichlorophenol	PCB-1242 (Arochlor 1242)
1,2-dichloropropane (1,3-dichloropropane)	PCB-1254 (Arochlor 1254)
2,4-dimethylphenol	PCB-1221 (Arochlor 1221)
2,4-dinitrotoluene	PCB-1232 (Arochlor 1232)
2,6-dinitrotoluene	PCB-1248 (Arochlor 1248)
1,2-diphenylhydrazine	PCB-1260 (Arochlor 1260)
Ethylbenzene	PCB-1016 (Arochlor 1016)
Fluoranthene	Toxaphene

C. SPECIAL CONDITIONS

1. This permit may be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C), and (D), 304(b)(2) and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (b) Controls any pollutant not limited in the permit.The permit as modified or reissued under this paragraph shall also contain any requirements of the Act then applicable.
2. All outfalls must be clearly marked in the field.
3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.
4. Changes in Discharges of Toxic Substances. The permittee shall notify the Director as soon as practicable for any reason to believe:
 - (a) That any activity has occurred or will occur which will result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge exceeds the highest of the following "notification levels":
 - (1) One hundred micrograms per liter (100 ug/L);
 - (2) Two hundred micrograms per liter (200 ug/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
 - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
5. Report as no-discharge when a discharge does not occur during the report period.
6. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (e) There shall be no significant human health hazard from incidental contact with the water;
 - (f) There shall be no acute toxicity to livestock or wildlife watering;
 - (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
7. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
 - (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
 - (b) If sludge is not removed by a contract hauler, permittee is authorized to land apply biosolids that are removed from the domestic wastewater treatment lagoon during lagoon cleanout and maintenance activities. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids from the lagoon. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.

Date of Fact Sheet: June 23, 2004

Date of Public Notice: October 22, 2004

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT
FACT SHEET

This Fact Sheet explains the applicable regulations, rationale for development of this permit and the public participation process.

NPDES PERMIT NUMBER: MO-0000159

FACILITY NAME: Holcim (US) Inc., Clarksville Plant

OWNER NAME: Holcim (US) Inc.

LOCATION: Secs. 7 and 18 T53N R1E County: Pike

RECEIVING STREAM: Calmet Creek and Mississippi River

FACILITY CONTACT PERSON: Dennis Harding TELEPHONE: (573) 242-3571

FACILITY DESCRIPTION AND RATIONALE

This permit is being reissued and includes categorical limits from 40 CFR Part 411, Subpart A for Outfall #001 and to add other appropriate limits to other outfalls.

Calculation of Total Suspended Solids limit for Holcim - Clarksville Plant based on 40 CFR 411.22

Maximum yearly production of dry slurry before calcination = 2.5 million tons/year

$2,500,000 / 365 \text{ days} = 6,849.3 \text{ tons/day} * 2,000 \text{ lbs/ton} = 13,698,630 \text{ lbs./day}$

$13,698,630 \text{ lbs. dry slurry/day} * 0.0004 (0.4 \text{ lb/1000 lb}) = 5,479.4 = 5,480 \text{ lbs./day Total}$

Suspended Solids allowed. Categorical limits were added to outfall 001 because outfall 006 is diluted by stormwater.

This permit will be issued for a period of five years.

FACT SHEET
Holcim (US) Inc., Clarksville Plant
MO-0000159

PUBLIC PARTICIPATION

Public comments on the proposed permit are being requested in accordance with Public Participation regulation under 10 CSR 20-6.020.

A copy of the public notice and this fact sheet are being forwarded to the applicant, the District Engineer of the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the Environmental Protection Agency and the Missouri Department of Conservation. Other interested individuals may obtain a copy on request by writing to the address listed below for comment letters.

Comments should be confined to the issues relating to the proposed action and permit and their effect on water quality. The Missouri Department of Natural Resources may not consider comments or objections to a permit based on questions of zoning, location, or other non-water quality issues. See, Curdt v. MO Clean Water Commission, 586 S.W. 2d 58 (Mo. App. 1979).

The proposed determinations of the draft permit are tentative pending the public notice process.

Persons wishing to comment upon or object to the proposed determinations are invited to submit them in writing to: Department of Natural Resources, Water Protection and Soil Conservation Division, (Missouri Clean Water Commission), P.O. Box 176, Jefferson City, Missouri 65102, ATTN: Peter Goode, P.E., Chief, NPDES Permits and Engineering Section. Please include the permit number of the draft permit in all comment letters.

Within 30 days from the public notice date, as listed on page one, all water quality comments received will be considered in the formulation of all final determinations regarding this application. If response to the public notice indicates significant public interest, a public hearing may be held after due notice. Public hearing and/or issuance of the NPDES permit will be processed according to 10 CSR 20-6.020.

Copies of all draft permits, comments and other information are available for inspection and copying at the Department of Natural Resources, Water Protection and Soil Conservation Division, (Missouri Clean Water Commission) Water Protection Program, P.O. Box 176, 205 Jefferson Street, Jefferson City, Missouri 65102.

PERMIT REGULATIONS

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollutant Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. NPDES permits in Missouri are issued by the Director of the Department of Natural Resources under an approved NPDES program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended).

WATER QUALITY STANDARDS

10 CSR 20-7.031 Missouri Water Quality Standards, Missouri Department of Natural Resources (the Department) "defines the Clean Water Commission's water quality objectives in terms of water uses to be maintained and the criteria to protect those uses".

EFFLUENT LIMITATIONS

In order to protect these beneficial uses and the water quality of surface waters and groundwater, effluent limitations are being established under federal and state laws. The monitoring requirements for all parameters have been established by the Department in compliance with 10 CSR 20-7.015 Effluent Regulation.

The current Department effluent regulations 10 CSR 20-7.015 states that non-domestic waste discharges "shall meet the applicable control technology currently effective or that which will become effective during the life of the permit. Where this definition is not available or applicable the Department shall set specific parameter limitations using best engineering judgment as defined in 402(a)(1) of the Federal Clean Water Act".

STANDARD CONDITIONS

The standard conditions attached to the draft permit are applied to all NPDES permittees. They reflect requirements of federal (40 CFR 122) and state law (10 CSR 20-Chapter 6) with respect to NPDES permittee duties, responsibilities and liabilities.

WATER QUALITY REVIEW SHEET
Determination of Effluent Limits

FACILITY INFORMATION

Facility Name: Holcim (US) Inc. - Clarksville Plant NPDES #: MO-0000159

Facility Type/Description: Cement Plant

8-Digit Huc: 07110004-110003 County: Pike

Legal Description: Secs. 7 and 18, T53N, R1E

Latitude/Longitude: _____

Water Quality History And Special Problems: 2000: Cooling system leak discharged bleach (Na Cl O) thus the reason for the addition of Total Residual Chlorine to Outfall #001

OUTFALL CHARACTERISTICS

Outfall	Design Flow (MGD)	Treatment Type	Receiving Waterbody	Main Contaminant Of Concern
001	2.5	Settling basin	Mississippi River via 006	pH, TSS
002	0.335	Settling basin	Calumet Creek	pH, TSS
003	0.05	Treatment plant	Mississippi River via 006	pH, TSS
005	Stormwater	Settling basin	Mississippi River	pH, TSS
006	2.5	Settling basin	Mississippi River	pH, TSS
007	Stormwater	None	Mississippi River	pH, TSS

RECEIVING WATERBODY INFORMATION

Waterbody	Class	7q10(Cfs)	*Designated Uses	Other Characteristics
Mississippi River	(P)	40,000	irr, ind, btg, dws	

*Cool water fishery (clf), cold water fishery (cdf), irrigation (irr), industrial (ind), boating & canoeing (btg), drinking water supply (dws), whole body contact recreation (wbc), protection of warmwater aquatic life and human health (aql), livestock & wildlife watering (lww)

PERMIT LIMITS AND INFORMATION

TMDL Watershed: Yes ☐ No ☒ Disinfection Waiver: Yes ☐ No ☐ NA ☒
W.L.A. Study Conducted: Yes ☐ No ☒ 303d Waterbody: Yes ☒ No ☐ NA ☐
Disinfection Required: Yes ☐ No ☒ Violations: Yes ☐ No ☒

Outfall #001Wet Test: Yes ☐ No ☒ Frequency: _____ A.E.C. _____ Limit: _____

PARAMETER	Daily Maximum	Weekly Average	Monthly Average
Flow (MGD)	*		*
Total Suspended Solids (TSS)	263 mg/L		263 mg/L
Oil and Grease (O/G)	*		*
Total Petroleum Hydrocarbons (TPH)	*		*
pH (SU)	6-9		6-9
Total Residual Chlorine (TRC)	0.1 mg/L		0.1 mg/L
Chemical Oxygen Demand (COD)	*		*
Total Suspended Solids (TSS)	5,480 lbs.		5,480 lbs.

Outfall #002Wet Test: Yes ☐ No ☒ Frequency: _____ A.E.C. _____ Limit: _____

PARAMETER	Daily Maximum	Weekly Average	Monthly Average
Flow (MGD)	*		*
Total Suspended Solids (TSS)	50 mg/L		50 mg/L
Oil and Grease (O/G)	15 mg/L		10 mg/L
Total Petroleum Hydrocarbons (TPH)	15 mg/L		10 mg/L
pH (SU)	6-9		6-9
Total Toxic Organics (TTO)	*		*

Outfall #003Wet Test: Yes ☐ No ☒ Frequency: _____ A.E.C. _____ Limit: _____

PARAMETER	Daily Maximum	Weekly Average	Monthly Average
Flow (MGD)	*		*
Biochemical Oxygen Demand (BOD)		45 mg/L	30 mg/L
Total Suspended Solids (TSS)		45 mg/L	30 mg/L
pH (SU)	6-9		6-9

Outfalls #005 and #007Wet Test: Yes ☐ No ☒ Frequency: _____ A.E.C. _____ Limit: _____

PARAMETER	Daily Maximum	Weekly Average	Monthly Average
Flow (MGD)	*		*
Total Suspended Solids (TSS)	50 mg/L		50 mg/L
Oil and Grease (O/G)	15 mg/L		10 mg/L
pH (SU)	6-9		6-9

Outfall #006Wet Test: Yes ☐ No ☒ Frequency: _____ A.E.C. _____ Limit: _____

PARAMETER	Daily Maximum	Weekly Average	Monthly Average
Intake Total Suspended Solids (TSS)	*		*
Discharge Total Suspended Solids (TSS)	*		*
Net Total Suspended Solids (TSS)	50 mg/L		50 mg/L
Total Toxic Organics (TTO)	*		*
Total Residual Chlorine (TRC)	0.1 mg/L		0.1 mg/L
Oil and Grease (O/G)	20 mg/L		15 mg/L
pH (SU)	6-9		6-9

RECEIVING WATER MONITORING REQUIREMENTS

Site - Mississippi River Upstream

Parameter(S)	Sampling Frequency	Sample Type	Location
Total Suspended Solids (mg/L)	Quarterly	Grab	At intake

Derivation and Discussion of Limits

TOTAL SUSPENDED SOLIDS: FROM 40 CFR 411

PH: FROM 40 CFR 411

OIL AND GREASE: FROM GENERAL PERMITS

TOTAL PETROLEUM HYDROCARBONS: FROM GENERAL PERMITS

TOTAL RESIDUAL CHLORINE: 10 TIMES WATER QUALITY STANDARD. ALSO THE LOWEST DETECTION LEVEL ACHIEVABLE

OUTFALL #003 (WWTP) LIMITS FROM 10 CSR 20-7.010

OUTFALL #001 TOTAL SUSPENDED SOLIDS LIMIT IS CALCULATED FROM 40 CFR 411.22 AND IS SHOWN ON FACT SHEET

Reviewer: Tim L. Stallman

Date: June 23, 2004

Unit Chief: Richard J. Laux

Monitoring and effluent limits contained within this document have been developed in accordance with EPA guidelines using the best available data and are believed to be consistent with Missouri's Water Quality Standards and Effluent Regulations. If additional water quality data or anecdotal information are available that may affect the recommended monitoring and effluent limits, please forward these data and information to the author.